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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,975	02/14/2000	Pawan Goyal	4464	7364

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EXAMINER

DONAGHUE, LARRY D

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/503,975

Applicant(s)

GOYAL, PAWAN

Examiner

Larry D. Donaghue

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56,58-90,92 and 93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 58-90,92,93 and 156 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date see attached.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Claims 1-56, 58-90, 92 and 93 are presented for examination.
2. The affidavit filed on 03/08/2005 under 37 CFR 1.131 has been considered but is ineffective to overcome the Sharma et al. or Deianov et al. references.
3. The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Sharma et al. or Deianov et al. reference.

For the following reason "The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular date. Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of 37 CFR 1.131(b). *In re Borkowski*, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also *In re Harry*, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit "asserts that facts exist but does not tell what they are or when they occurred.")."
4. The rejection is maintained and set forth below.
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
6. Claims 1-6, 8-11, 37-46, 50, 58-59, 75-80, 84, 92 and 93 rejected under 35 U.S.C. 102(e) as being anticipated by Sharma et al. (6,754,716)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the

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reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As to claim 1, Sharma et al. taught computer system for restricting network address-based communication by selected processes to a set of specific network addresses, the method comprising: associating at least one selected process (col. 3, lines 61-66; Note a virtual device is a process.) with at least one network address (col. 5, lines 20-25) ; determining whether an attempted network address-based communication of a selected process is via an associated address; and in response to a determination that the communication is via an associated address, allowing the communication to proceed (col. 2, lines 1-3).

As to claim 2, Sharma et al. taught loading at least one selected process into computer memory; and storing at least one association, between the process and at least one network address (300, fig 3; col. 5, lines 21-23, rebooting a hardware device is equivalent to loading a virtual device).

As to claim 3, Sharma et al. taught the associations between selected processes and network addresses are stored in an association table in a computer memory of the computer system (300, 308, fig 3).

As to claim 4, Sharma et al. taught the association table is stored in operating system address space (300, 308, fig 3).

As to claim 5, Sharma et al. taught a network address-based communication comprises an attempt to designate a network address to be used for subsequent communication (col. 5, lines 44-52).

As to claim 6, a network address-based communication comprises an attempt to associate a communication channel with a network address, this feature is inherent in an Internet system.

As to claim 8, Sharma et al. taught a network address-based communication comprises an attempt to establish a connection to a second process (col. 3, line 55 – col. 4, line 11).

As to claim 9, Sharma et al. taught a network address-based communication comprises an attempt to transmit data to a second process (col. 1, lines 40-63).

As to claim 10, Sharma et al. taught the second process (col. 3, lines 61-66; Note a virtual device is a process.) is executing in a computer memory of the computer system (col. 3, line 55 – col. 4, line 11).

As to claim 11, Sharma et al. taught the second process is executing in a computer memory of a second computer system (col. 3, line 55 – col. 4, line 11).

As to claims 37-40, Sharma et al. taught the operation was performed in software and that the request is terminated and no further action is taken, if the address is not authorized. Generating of code is inherent.

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As to claim 41, Sharma et al. taught the set consists of one network address (col. 5, line 20-33).

As to claim 42, Sharma et al. taught the set consists of at least two network addresses (col. 5, line 20-33).

As to claim 43, Sharma et al. taught associating at least one selected process with at least one network address (col. 5, lines 20-32); determining whether an attempted network address-based communication of a selected process is via an associated address; and in response to a determination that the attempted communication is not via an associated address, not allowing the attempted communication to proceed (col. 5, lines 52-65).

As to claims 44-46, the attempt to associate a communication channel with a network address is an inherent TCP/IP protocol stack as taught by Sharma et al.

As to claim 50, Sharma et al. taught the association between network devices and the network address, if only one address is assigned to the host it would be unique.

As to claims 58-59, 75-80 and 84, they correspond to the method claims in program code format previously addressed.

As to claim 92, Sharma et al. taught associating at least one selected process (col. 3, lines 61-66; Note a virtual device is a process.) with at least one network address (col. 5, lines 20-25); detecting when a selected process attempts to communicate via an unassociated address; not allowing the attempted communication to proceed (col. 2, lines 1-3).

As to claim 93, Sharma et al. taught program code for associating at least one selected process with at least one network address (col. 5, lines 20-25); program code for detecting when a selected process (col. 3, lines 61-66; Note a virtual device is a process.) attempts to communicate via an unassociated address; program code for not allowing the attempted communication to proceed; and a computer readable medium on which the program codes are stored (col. 2, lines 1-3).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 47-49 and 81-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al. as applied to claims 1 above, and further in view of Official Notice.

Sharma et al. taught the invention as claimed except for the use of a wild card in the addressing, the use of a wild card is well known in art, as it allows multiple association to a single address as would conserve memory space.

Claims 12-36 and 60-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al. as applied to claims 1-5, 58 and 59 above, and further in view of Deianov et al. (6,529,985).

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As to claims 12, 16, 17, 21, 24 and 32, Sharma et al. did not expressly teach modifying the software to intercept system calls to perform the enhanced features of the ARM, Deianov et al. taught this feature and suggested its implementation for modifying software to perform enhanced features.

As to claim 22, Sharma et al. taught the use of TCP/IP stack (figure 3)

As to claims 23, 28, 29 and 30, the child process would inherit the attributes of the parent therefore it would be obvious that the child process would inherit the association of the network addresses. As to claim 28, it would be obvious to store the address for future reference.

As to claim 31 and 36, it would have been obvious to one of ordinary skill in the data processing art to delete the associations to conserve memory within the operating system kernel.

As to claim 13, 18, 25, and 33, Deianov et al. taught storing object code that performs the designated task; and wherein intercepting comprises replacing a pointer to a system call with a pointer to the object code, such that calling the system call causes the object code to execute (col. 6, lines 16-35).

As to claims 14, 19, 26 and 34, Deianov et al. taught loading an interception module into computer memory, the interception module comprising the object code (col. 6, lines 16-35, figure 3).

As to claims 15, 20, 27 and 35, Deianov et al. taught the interception module is loaded into a running operating system kernel (col. 6, lines 16-35 and figure 3).

As to claims 60-74, they correspond to the method claims in program code format previously addressed, *supra*.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry D. Donaghue whose telephone number is 571-272-3962. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LARRY D. DONAGHUE
PRIMARY EXAMINER

